

Amendments to the Claims

Please cancel Claims 4, 5, 9, and 12-17. Please amend Claims 2, 3, 6, 7, 8, 10 and 11. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Canceled)
2. (Currently amended) A method of delivering an agent of interest into and/or across a luminal surface of vascular endothelium in a ~~tissue~~ lung-specific manner, comprising the steps of:
 - a) selecting an agent of interest comprising an active agent component and a transport agent component, wherein the transport agent component comprises an antibody or antibody fragment that binds to and localizes to a component of caveolae of the luminal surface of the lung vascular endothelium upon contact with the luminal surface, wherein the component to which the agent binds and localizes is ~~tissue~~ lung specific; and
 - b) contacting the luminal surface of vasculature with the agent of interest, thereby delivering the agent into and/or across the luminal surface of the vascular endothelium in a ~~tissue~~ lung-specific manner.
3. (Currently amended) A method of delivering an agent of interest across a luminal surface of vascular endothelium and from one side of an underlying cell to another side in a ~~tissue~~ lung-specific manner, comprising the steps of:
 - a) selecting an agent of interest comprising an active agent component and a transport agent component, wherein the transport agent component comprises an antibody or antibody fragment that binds to and localizes to a component of caveolae of the luminal surface of the lung vascular endothelium upon contact with the luminal surface, wherein the component to which the agent binds and localizes is ~~tissue~~ lung specific; and

- b) contacting the luminal surface of vasculature with the agent of interest, thereby delivering the agent across the luminal surface of the vascular endothelium and from one side of an underlying cell to another side in a ~~tissue~~ lung-specific manner.
- 4-5. (Canceled).
6. (Currently amended) The method of claim ~~[[4]]~~ 3, wherein the agent of interest comprises a nucleic acid.
7. (Currently amended) The method of claim ~~[[4]]~~ 3, wherein the agent of interest comprises an immunotoxin.
8. (Currently amended) The method of claim ~~[[4]]~~ 3, wherein the active agent component is selected from the group consisting of: an antibody, a nucleic acid, a drug, a toxin, and a diagnostic agent.
9. (Canceled)
10. (Currently amended) The method of claim ~~[[4]]~~ 3, wherein the active agent component and the transport agent component are the same component.
11. (Currently amended) The method of claim ~~[[10]]~~ 3, wherein the active agent component is selected from the group consisting of: an antibody, a drug, a toxin, and a diagnostic agent.
- 12-17. (Canceled).